Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of the claims in the application.

Listing of Claims:

Please amend the claims as follows without prejudice. No new matter has been added by way of these amendments.

1. (Original) A cabled communication link for a drill string, comprising:

at least two adapter subs spaced apart within the drill string by a distance that exceeds the length of three interconnected drill pipe joints; and

a cable connecting the two adapter subs for communication of a signal therebetween.

2. (Original) The cabled communication link of claim 1, wherein each of the adapter subs includes

a communicative coupler intermediate its ends, and

the cable has a pair of sub connectors carried in series thereby, each of the sub connectors having a complementing communicative coupler, whereby alignment of a sub connector's complementing communicative coupler with the communicative coupler of an adaptor sub establishes communication therebetween.

3. (Original) The cabled communication link of claim 2, wherein

each of the adapter subs further includes an inner annular recess spaced a predetermined axial distance from the communicative coupler, and

each of the sub connectors further has a latch for engaging the inner annular recess of one of the adapter subs and positioning its complementing communicative coupler in alignment with the communicative coupler of the one adapter sub.

4. (Original) The cabled communication link of claim 3, wherein

the latch of each of the sub connectors includes a locking dog having at least one key for engaging the annular recess of one of the adapter subs, the key being spaced from the complementing communicative coupler of each sub connector by the predetermined axial distance,

whereby engagement by the key with the annular recess of one of the adapter subs when the cable is disposed within the drill string aligns the sub connector's complementing communicative coupler with the communicative coupler of the one adaptor sub and establishes communication therebetween.

5. (Original) The cabled communication link of claim 4, wherein the locking dog includes a detent latch.

6. (Original) The cabled communication link of claim 2, wherein the communicative couplers and complementing communicative couplers are inductive couplers.

7. (Original) The cabled communication link of claim 1, wherein a plurality of wired drill pipe joints are interconnected within the drill string between the two adapter subs to form a piped communication link, whereby the cabled communication link establishes an alternative pathway to the piped communication link for transmitting a signal through the drill string.

8. (Original) The cabled communication link of claim 1, wherein a non-wired section of the drill string is disposed between the two adapter subs, whereby the cabled communication link establishes a pathway for transmitting a signal through the non-wired section of the drill string.

9. (Original) The telemetry system of claim 8, wherein the non-wired section of the drill string includes one or more non-wired drill pipe joints.

10. (Original) The telemetry system of claim 8, wherein the non-wired section of the drill string includes one or more non-wired utility subs.

11. (Original) A telemetry system for a drill string disposed within a wellbore, comprising:

a plurality of wired drill pipe joints within the drill string that form a first communication link, each of the wired drill pipe joints having

a communicative first coupler at or near each end thereof, and

a first cable connecting the communicative first couplers; and

a pair of adapter subs spaced apart within the drill string by a distance that exceeds the length of three interconnected drill pipe joints, each of the adapter subs having

a communicative second coupler at or near at least one of the adapter sub's ends, and

being adapted for connection to a second cable disposed in the drill string such that a second cable connects the pair of adapter subs to form a second communication link,

one of the adapter subs being connected in the drill string such that its communicative second coupler is adjacent a communicative first coupler of one of the wired drill pipe joints to couple the one adapter sub to the one wired drill pipe joint for

communication therebetween, whereby the first communication link may be coupled for communication with a second communication link to transmit signals through the drill string.

12. (Original) The telemetry system of claim 11, wherein the one adapter sub is connected between two of the wired drill pipe joints within the drill string, whereby a portion of the first communication link may be bypassed by a second communication link.

13. (Original) The telemetry system of claim 11, wherein the one adapter sub is connected between the one wired drill pipe joint and a non-wired section of the drill string, whereby the non-wired section of the drill string may be converted to a cabled section by a second communication link.

14. (Original) The telemetry system of claim 13, wherein the non-wired section of the drill string includes one or more non-wired drill pipe joints.

15. (Original) The telemetry system of claim 13, wherein the non-wired section of the drill string includes one or more non-wired utility subs.

16. (Original) The telemetry system of claim 11, wherein the communicative first couplers of the wired drill pipe joints and the communicative second couplers of the adapter subs are inductive couplers.

17. (Original) The telemetry system of claim 11, further comprising a second cable disposed within the drill string for connecting the pair of adapter subs to form a second communication link coupled for communication with the first communication link.

18. (Original) The telemetry system of claim 17, wherein each of the adapter subs includes a communicative third coupler intermediate the communicative second couplers, and

the second cable has a pair of sub connectors carried in series thereby, each of the sub connectors having

a communicative fourth coupler, whereby alignment of the sub connector's communicative fourth coupler with the communicative third coupler of the one adapter sub establishes communication between the first communication link and the second communication link.

19. (Currently Amended) The telemetry system of claim 18, wherein

each of the adapter subs further includes an inner annular recess spaced a predetermined axial distance from the communicative third coupler, and

each of the sub connectors further has a latch for engaging the inner annular recess of an adapter sub and positioning its communicative fourth coupler in alignment with the communicative third coupler of the engaged adapter sub.

20. (Original) The telemetry system of claim 18, wherein

the latch of each of the sub connectors includes a locking dog having at least one key for engaging the inner annular recess of one of the adapter subs, the key being spaced from the communicative fourth coupler of each sub connector by the predetermined axial distance,

whereby engagement by the key with the annular recess of an adapter sub when the cable is disposed within the drill string aligns the sub connector's communicative fourth coupler with the communicative third coupler of the engaged adaptor sub and establishes communication therebetween.

21. (Original) The telemetry system of claim 20, wherein the locking dog includes a detent latch.

22. (Original) The telemetry system of claim 18, wherein the communicative third couplers and the communicative fourth couplers are inductive couplers.

23. (Currently Amended) The telemetry system of claim 11, comprising a plurality of adapter subs disposed at spaced intervals within the drill string, each of the adapter subs being adapted for connecting to a second cable disposed within the drill string such that a second cable can connect at least two of the adapter subs to form a second communication link, one of the adapter subs being connected in the drill string such that its communicative second coupler is adjacent a communicative first coupler of one of the wired drill pipe joints to couple the one adapter sub to the one wired drill pipe joint for communication therebetween, whereby the first communication link may be coupled for communication with a second communication link.

24. (Original) The telemetry system of claim 23, further comprising a second cable disposed within the drill string for connecting the one adapter sub and at least one other of the plurality of adapter subs to form a second communication link coupled for communication to the first communication link.

25. (Original) The telemetry system of claim 11, further comprising:

a measurement tool disposed in a lower section of the drill string;

a surface computer for processing data acquired by the measurement tool;

a first communication sub disposed in or above an upper section of the drill string for communicating with the surface computer; and

a second communication sub disposed in the lower section of the drill string for communicating with the measurement tool;

the first communication link providing at least a portion of an operative communicative connection between the downhole communication sub and the surface communication sub.

26. (Original) The telemetry system of claim 25, wherein the measurement tool is also an adapter sub.

27. (Original) The telemetry system of claim 25, further comprising a second cable disposed within the drill string and connected across the pair of adapter subs, thereby forming a second communication link connected for communication with the first communication link, the second communication link also providing at least a portion of an operative communicative connection between the downhole communication sub and the surface communication sub.

28. (Original) The telemetry system of claim 25, wherein the first communication sub is disposed beneath a kelly joint in the drill string.

29. (Original) The telemetry system of claim 25, wherein the first communication sub is disposed above a kelly joint in the drill string.

30. (Original) The telemetry system of claim 25, wherein the first communication sub is disposed beneath a power swivel supporting the drill string.

31. (Original) The telemetry system of claim 25, wherein the first communication sub is disposed within a power swivel supporting the drill string.

32. (Original) The telemetry system of claim 29, wherein the first communication sub includes a rotary transformer.

33. (Original) The telemetry system of claim 29, wherein the first communication sub includes a slip ring.

34. (Original) The telemetry system of claim 25, wherein the first communication sub includes a first wireless transceiver in wired communication with the first communication link.

35. (Original) The telemetry system of claim 34, further comprising a second wireless transceiver in wired communication with the surface computer, the first and second wireless transceivers being adapted for wireless communication therebetween.

36. (Original) The telemetry system of claim 35, wherein the second wireless transceiver is disposed in a mud return line connected between a mud pit and the wellbore.

37. (Original) The telemetry system of claim 25, wherein the first communication sub includes:

a wired drill pipe modem in wired communication with the first communication link;

a wireless modem in wired communication with the wired drill pipe modem; and

a power supply powering the modems.

38. (Original) The telemetry system of claim 37, wherein the power supply includes one or more batteries.

39. (Original) A telemetry system for a drill string, comprising:

a plurality of wired drill pipe joints within the drill string that form a first communication channel, each of the wired drill pipe joints having

communicative first couplers at or near both ends thereof, and

a cable connecting the communicative first couplers; and

a pair of adapter subs spaced apart within the drill string by a distance that exceeds the length of three interconnected drill pipe joints, each of the adapter subs having

a communicative second coupler at or near at least one of its ends, and

being adapted for connection to a second cable disposed within the drill string such that the second cable connects the pair of adapter subs to form a second communication channel,

one of the adapter subs being connected in the drill string such that its communicative second coupler is adjacent a communicative first coupler of one of the wired drill pipe joints to couple the one adapter sub to the one wired drill pipe joint for communication therebetween, whereby the first communication channel may be coupled for communication with a second communication channel to transmit signals through the drill string.

40. (Original) The telemetry system of claim 39, further comprising a second cable disposed within the drill string for connecting the pair of adapter subs to form a second communication channel coupled for communication with the first communication channel.

41. (Original) A telemetry system for a drill string disposed in a wellbore, the drill string including a plurality of interconnected drill pipe joints suspended by a derrick and engaged by a torque-applying mechanism for rotation thereof, a measurement tool suspended by the drill pipe joints for acquiring wellbore data, a downhole communication sub suspended by the drill pipe joints for communicating with the measurement tool via

the drill pipe joints, and a drill bit defining the lower end of the drill string, the system comprising:

a surface computer for processing data acquired by the measurement tool; and

a surface communication sub disposed in the drill string beneath a portion of the drill string engaged by the torque-applying mechanism for wirelessly-communicating with the surface computer, the surface communication sub communicating with the downhole communication sub via the drill pipe joints.

42. (Original) The telemetry system of claim 41, wherein the surface communication sub includes a first wireless transceiver, and the telemetry system further comprises a second wireless transceiver disposed in a mud return line connected between a mud pit and the wellbore, the second wireless transceiver being in wired communication with the surface computer.

43. (Original) The telemetry system of claim 41, wherein the downhole communication sub communicates with the surface communication sub via mud-pulse telemetry.

44. (Original) The telemetry system of claim 41, wherein the downhole communication sub communicates with the surface communication sub via electromagnetic telemetry.

45. (Original) The telemetry system of claim 41, wherein the downhole communication sub communicates with the surface communication sub via pipe acoustic telemetry.

46. (Original) The telemetry system of claim 41, wherein at least some of the drill pipe joints are sequentially-connected wired drill pipe joints having a first communication link therethrough providing at least a portion of an operative communicative connection between the downhole communication sub and the surface communication sub.

47. (Original) The telemetry system of claim 46, further comprising a means for forming a second communication link coupled for communication with the first communication link.

48. (Original) The system of claim 47, wherein each of the wired drill pipe joints have

communicative first couplers at or near both ends thereof, and

a first cable connecting the communicative first couplers, and

the second communication link-forming means includes

a pair of adapter subs spaced apart within the drill string by a distance that exceeds the length of three interconnected drill pipe joints, each of the adapter subs having

a communicative second coupler at or near at least one of its ends, and

being adapted for connection to a second cable disposed within the drill string such that a second cable connects the pair of adapter subs to form a second communication link,

one of the adapter subs being connected in the drill string such that its communicative second coupler is adjacent a communicative first coupler of one of the wired drill pipe joints to couple the one adapter sub to the one wired drill pipe joint for communication therebetween, whereby the first communication link may be coupled for communication with a second communication link to transmit signals through the drill string.

49. (Original) The telemetry system of claim 48, wherein the measurement tool also functions as an adapter sub.

50. (Original) The telemetry system of claim 48, further comprising a second cable disposed within the drill string for connecting the pair of adapter subs to form a second communication link coupled for communication with the first communication link.

51. (Original) The telemetry system of claim 50, wherein each of the adapter subs includes a communicative third coupler intermediate the communicative second couplers, and the second cable has a pair of sub connectors carried in series thereby, each of the sub connectors having

a communicative fourth coupler, whereby alignment of the sub connector's communicative fourth coupler with the communicative third coupler of an adapter sub establishes communication therebetween.

52. (Original) A downhole drilling method, comprising the steps of:

drilling a wellbore with a drill string;

acquiring wellbore data while drilling with a measurement tool disposed in the drill string; and

transmitting the acquired wellbore data to the surface of the wellbore via a communication link defined by at least two adapter subs spaced apart within the drill string by a distance that exceeds the length of three interconnected drill pipe joints and a cable connecting the adapter subs for transmitting signals between the adapter subs.

53. (Original) The method of claim 52, further comprising the step of transmitting the acquired wellbore data to the surface of the wellbore via another communication link defined by a plurality of interconnected wired drill pipe joints.

54. (Original) The method of claim 53, further comprising the step of transmitting the acquired wellbore data to the surface of the wellbore via a third communication link defined by a surface

communication sub wired for communication to the interconnected wired drill pipe joints, the surface communication sub transmitting the acquired wellbore data from the interconnected wired drill pipe joints to a surface computer for processing.

55. (Original) The method of claim 54, wherein the surface communication sub employs a wireless transceiver for transmitting the acquired wellbore data to the surface computer.

56. (Original) A downhole drilling method, comprising the steps of:

drilling a wellbore with a drill string;

acquiring wellbore data while drilling with a measurement tool disposed in the drill string; and

transmitting the acquired wellbore data to the surface of the wellbore via a first communication link defined by a plurality of wired drill pipe joints and a second communication link defined by at least a pair of adapter subs spaced apart by a distance that exceeds the length of three interconnected drill pipe joints, the adapter subs being connected by a second cable for communication of signals between the adapter subs.

57. (Original) The downhole drilling method of claim 56, wherein the transmitting step includes using the second communication link to bypass a portion of the first communication link.

58. (Original) The downhole drilling method of claim 56, wherein the step of transmitting includes using the second communication link to convert a non-wired section of the drill string into a cabled section.

59. (Original) A downhole drilling method, comprising the steps of:

drilling a wellbore with a drill string having a plurality of adapter subs disposed therein, successive adapter subs being separated by at least four interconnected wired drill pipe

joints, the adapter subs and wired drill pipe joints together defining a first communication link;

acquiring wellbore data while drilling with a measurement tool disposed in the drill string;

transmitting the acquired wellbore data to the surface of the wellbore via the first communication link;

upon detecting the presence of a fault in the first communication link, disposing a cable within the drill string having a pair of spaced sub connectors connected in series along the cable for establishing communication with a respective pair of consecutive adapter subs, whereby a second communication link is established by such communication that bypasses the interconnected wired drill pipe joints between the pair of consecutive adapter subs.

60. (Original) The downhole drilling method of claim 59, further comprising the steps of:

determining if the fault lies within the portion of the drill string between the pair of consecutive adapter subs;

upon determining that the fault does not lie within the portion of the drill string between the pair of consecutive adapter subs, moving the cable within the drill string to establish communication between the pair of sub connectors and other respective pairs of consecutive adapter subs until the location of the fault is identified; and

curing the fault.